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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/817,643	04/02/2004	Guo-Hua Zheng	17662.002US1	2858

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EXAMINER	
TRAN LIEN, THUY	

ART UNIT	PAPER NUMBER
1781	

MAIL DATE	DELIVERY MODE
08/05/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/817,643	ZHENG ET AL.	
	Examiner	Art Unit	
	Lien T. Tran	1781	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 May 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-5,10,12-23,32 and 53* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-5,10,12-23,32,53* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

The 112 second paragraph rejection is hereby withdrawn due to the amendment filed 5/19/10.

Claims 1,3-5,10,12-23,32 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morgan (2003/0154974)

Morgan discloses a fiber composition from cereal grain such as barley and oats. The composition comprises beta glucan. The beta glucan gel , once formed, is washed with water to remove starch or protein or starch or protein that may have been hydrolyse. Starch may be removed by adding amylase; it is preferable during the glucan extraction to add an enzyme to reduce the average molecular weight of the glucan. The enzyme is cellulose. The low molecular weight beta glucan has an average molecular weight in the range of 5000-200000 daltons (5-200kd). (see paragraphs 0013, 0014, 0015, 0017, 0025, 0026, 0038.

Morgan discloses a fiber composition having the molecular weight as claimed. However, Morgan is silent with respect to the viscosity and the fat content However, the fiber composition in Morgan is prepared by substantially the same method as disclosed and the composition has a molecular weight within the range claimed; thus, it is obvious the composition will have the same viscosity as claimed. As to the fat content, it is known in the art that different variety of grains will have different lipid content, thus, the fat content can vary depending on the type of grain used. Furthermore, it is known in the art to remove fat using agent such as alcohol. It would have been obvious to one skilled in the art to remove the fat in the Morgan product using known agent when it is desired to obtain product having very low fat content. This would have been within the

skill of one in the art. As to the composition being stable, the beta glucan composition disclosed by Morgan has a molecular weight within the range claimed; thus, it is expected the viscosity is within the range claimed. Thus, whatever property results from the viscosity and molecular weight, it is expected the same result is obtained in the Morgan product.

Morgan does not disclose the protein content as claimed, the % of beta-glucan in the fiber composition, specific foods and the formulation for such foods as claimed.

Morgan discloses in paragraph 0024, " prior to concentrating of beta-glucan, it is preferable to remove starch and/or protein". Morgan also discloses in paragraph 0049 , " the final product contains protein and starch; in some cases this less pure form of be-glucan may be the preferred product". Thus, Morgan teaches the removal of protein is optional and not required because he teaches starch or protein is removed and the removal is a preferred embodiment. Thus, it would have been obvious to one skilled in the art to not remove the protein when a less pure composition and a high protein content are desired. It would have been obvious to vary the protein content by using grains having high protein content or to add protein source to the composition when desiring composition having high protein content for nutrition purposes. Morgan discloses in paragraph 0019 to add the fiber composition to processed foods. Thus, it would have been obvious to one skilled in the art to add the fiber composition to any type of food when desiring to enrich such food with beta glucan to obtain the health benefits provided by beta glucan. Formulations for food products can vary. All the foods claimed are well known in the art; thus, it would have been within the skill of one

in the art to determine the formulation for any particular food without undue experimentation. It would have been obvious to vary the amount of glucan in a composition depending on the fiber content wanted for the composition. This would have been an obvious matter of choice.

In the response filed 5/19/10 applicant argues that one skill in the art would recognize that the process taught by Morgan would not result in a modified beta glucan material with a molecular weight greater than 75kDa as shown in the declaration by Dr. Hess. The argument is not persuasive because the declaration is not found to be persuasive. As to the comments on the health benefits, there is nothing in the claims concerning health benefits; thus, it is not an issue that needs to be addressed in the rejection.

The declaration filed on 5/19/10 is not found to be persuasive. The declaration discusses several articles; however, none of the articles is used in the rejection. Thus, it is not seen how the discussion is relevant to the issue under consideration. The discussion of the health benefits is not germane to the rejection because the claims are directed to the fiber composition and food products containing the composition; there is no limitation on health benefits. The discussion of the " Glucagel" product is not related to the rejection because the product disclosed in the Morgan reference is not shown to be the same product as the " Glucagel". Paragraph 20 of the declaration states that one can see that Morgan is generating MW of less than 80kDa. This statement contradict the disclosure without any showing of factual evidence. In paragraph 0038, Morgan discloses " the process of this invention can be varied to give different beta-

glucan products". Morgan goes on to discuss that the molecular weight affects the physical properties and discloses the molecular weight of the beta-glucan products. Morgan discloses the low molecular weight beta glucan has an average molecular weight in the range of 5000-200000 dalton (5-200kda); thus, Morgan discloses beta-glucan having molecular weight of 200kda which falls within the range of 120-400kda claimed. In paragraph 0074, Morgan discloses the molecular weight can be altered by changing the quantities of beta-glucan degrading enzyme added to the reaction mixture. Table 3 shows a beta-glucan product with a molecular weight of 194000da (194kda) which also falls within the claimed ranges. The statement made in paragraph 22 is clearly contradicted by the disclosure of the reference. Paragraph 23 states that one skilled in the art would conclude that Morgan is describing " Glucagel production". This is a conclusion that is not supported by factual evidence. The declaration does not have any showing to show connection between the Morgan product and the Glucagel product. The comments made concerning the health benefits in Morgan do not indicate that the products generated is the same product as " Glucagel". Morgan does not disclose anywhere in the reference that the products made are known as " Glucagel".

Applicant's arguments filed 5/19/10 have been fully considered but they are not persuasive.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lien T. Tran whose telephone number is 571-272-1408. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on 571-272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

August 2, 2010

/Lien T Tran/

Primary Examiner, Art Unit 1781